Question 32089

According to 2nd Newtons Law, $\vec{F}=m\vec{a}$, where $\vec{F}$ is the net force, exerted on the object, m is the mass of the object, $\vec{a}$ is the acceleration of the object. Thus,

$|\vec{F}|=m|\vec{a}|=6\,kg\cdot 4\,\frac{m}{s^2}=24\,N$ - This is the net force acting on ball.